

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended/withdrawn): 1. A method of manufacturing a filter ~~(10)~~ for retaining a substance ~~(14)~~ originating from a radiation source ~~(12)~~, which the filter ~~comprises~~ comprising a thin layer ~~(18)~~ which is transparent to extreme ultraviolet and/or soft X-ray radiation ~~(16)~~, ~~characterized in that~~ wherein the filter ~~(10)~~ is resistant to high temperatures.

Claim 2 (currently amended/withdrawn): ~~A~~ The method ~~as claimed in of~~ claim 1, ~~characterized in that~~ wherein first the thin layer ~~(18)~~ and subsequently a support structure ~~(20)~~ for the thin layer ~~(18)~~ are manufactured, or in reverse order, the filter ~~(10)~~ being manufactured such that the thin layer ~~(18)~~ is connected to the support structure ~~(20)~~ in a high-temperature-resistant manner.

Claim 3 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 1, ~~characterized in that~~wherein at
least the thin layer-(18) is manufactured by means of a
chemical and/or physical deposition process.

Claim 4 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 1, ~~characterized in that~~wherein at
least the thin layer-(18) comprises preponderantly
zirconium, niobium, molybdenum, silicon, zirconium
carbide (ZrC), zirconium dioxide, silicon carbide (SiC),
silicon nitride (Si₃N₄), boron nitride (BN), or a
combination thereof.

Claim 5 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 2, ~~characterized in that~~wherein the
thin layer-(18) and the support structure-(20) are
manufactured as an integral whole.

Claim 6 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 1, ~~characterized in that~~wherein a
layer thickness-(22) for the thin layer-(18) of
approximately 100 nm is achieved.

Claim 7 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 2, ~~characterized in that~~wherein ~~that~~
the support structure-(20) comprises preponderantly
zirconium, niobium, molybdenum, silicon, zirconium
carbide (ZrC), zirconium dioxide, silicon carbide (SiC),
silicon nitride (Si.sub.3N.sub.4), boron nitride (BN), or
a combination thereof.

Claim 8 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 2, ~~characterized in that~~wherein a
thickness-(24) of approximately 1 .mu.m up to 1 mm is
adjusted for the support structure-(20).

Claim 9 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 2, ~~characterized in that~~wherein a
material having a melting point of at least 1300.degree.
C. is chosen for the thin layer-(18) and the support
structure-(20).

Claim 10 (currently amended/withdrawn): ~~A-The method as~~
~~elaimed inof~~ claim 2, ~~characterized in that~~wherein the

support structure ~~(20)~~ is constructed in the form of strips, for example forming a grid structure or honeycomb-type woven structure ~~(26)~~.

Claim 11 (currently amended/withdrawn): A ~~The~~ method as ~~claimed in of~~ claim 10, ~~characterized in that wherein~~ the woven structure ~~(26)~~ is generated by means of erosion, laser processing, or photochemical etching.

Claim 12 (currently amended: A device for retaining a substance ~~(14)~~ originating from a radiation source ~~(12)~~ ~~by means of using~~ a filter ~~(10)~~, ~~which the filter (10)~~ ~~comprising~~ a thin layer ~~(18)~~ that is transparent to extreme ultraviolet and/or soft X-ray radiation ~~(16)~~, ~~characterized in that wherein~~ the filter ~~(10)~~ is resistant to high temperatures.

Claim 13 (currently amended): A ~~The~~ device as ~~claimed in of~~ claim 12, ~~characterized in that wherein~~ the thin layer ~~(18)~~ is connected to a support structure ~~(20)~~ in a high-temperature-resistant manner, or in that the thin

layer-(18) and the support structure-(20) can be manufactured as an integral whole.

Claim 14 (currently amended): ~~A~~The device ~~as claimed~~
~~in~~of claim 13, ~~characterized in that~~wherein a material
used for the thin layer-(18) and the support structure
(20) has a melting point of at least 1300.degree. C.

Claim 15 (currently amended): ~~A~~The device ~~as claimed~~
~~in~~of claim 12, ~~characterized in that~~wherein at least the
thin layer-(18) can be manufactured by means of a
chemical and/or physical deposition process.

Claim 16 (currently amended): ~~A~~The device ~~as claimed~~
~~in~~of claim 12, ~~characterized in that~~wherein at least the
thin layer-(18) comprises preponderantly zirconium,
niobium, molybdenum, silicon, zirconium carbide (ZrC),
zirconium dioxide, silicon carbide (SiC), silicon nitride
(Si₃N₄), boron nitride (BN), or a combination thereof.

Claim 17 (currently amended): ~~The~~A device ~~as claimed~~
~~in~~of claim 12, ~~characterized in that~~wherein the thin

layer-(18) has a layer thickness-(22) of approximately 100 nm.

Claim 18 (currently amended): ~~A~~The device as ~~claimed~~
~~in~~of claim 13, ~~characterized in that~~wherein the support
structure-(20) has a thickness-(24) of approximately 1
.mu.m to 1 mm.

Claim 19 (currently amended): ~~A~~The device as ~~claimed~~
~~in~~of claim 13, ~~characterized in that~~wherein the support
structure-(20) ~~can be~~is constructed in the form of
strips, ~~for example in the form of a grid type or~~
~~honeycomb type woven structure (26).~~

Claim 20 (currently amended): ~~A~~The device as ~~claimed~~
~~in~~of claim 19, ~~characterized in that~~wherein the woven
structure-(26) ~~can be~~is obtained by means of erosion,
laser processing, or photochemical etching.

Claim 21 (currently amended): ~~The use of the filter (10)~~
~~as claimed in claim 12 in a~~An apparatus device for EUV
lithography comprising the device of Claim 12.

Claim 22 (currently amended): The apparatus for EUV lithography~~use as~~ claimed in claim 21, ~~characterized in that~~wherein ~~the a filter (10) of the device is operated~~ at a temperature of approximately 900.degree. C. to approximately 1300.degree. C.

Claim 23 (currently amended): The ~~use as~~apparatus for EUV lithography claimed in claim 21, ~~characterized in that~~wherein the temperature for the filter-(10) is adjustable such that the retained substance-(14) evaporates at ~~the a~~ prevailing pressure.

Claim 24 (currently amended): The ~~use as~~apparatus claimed in claim 21, ~~characterized in that~~wherein the temperature for the filter-(10) is adjustable such that the retained substance-(14) evaporates from the filter -(10) at a rate higher than that at which it is deposited thereon.

Claim 25 (currently amended): The ~~use as~~apparatus claimed in claim 21, ~~characterized in that~~wherein a foil

trap-(28) is additionally arranged between the radiation source-(12) and the filter-(10).

Claim 26 (currently amended): The ~~use as~~ apparatus claimed in claim 21, ~~characterized in that~~ wherein the filter-(10) seals off the radiation source-(12) in the form of a window.

Claim 27 (currently amended): The ~~use as~~ apparatus claimed in claim 26, ~~characterized in that~~ wherein the substance-(14) in the radiation source-(12) reaches a partial pressure of approximately 10 Pa.

Claim 28 (new): The device of claim 19, wherein the strips are in the form of a grid-type or honeycomb-type woven structure.